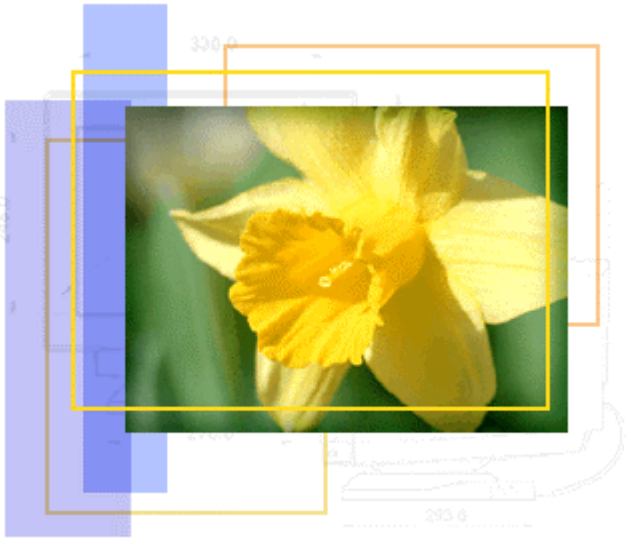
CTX

User's Manual

EX710F



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Safety Instructions

FCC Statement

This equipment has been tested to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

If a shielded-type power cord is supplied with this monitor, it is required in order to meet FCC emission limits and to prevent interference with nearby radio and television reception. Only shielded cables should be used to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

CE Statement

This device complies with the requirements of EMC (Electromagnetic Compatibility), and with Low Voltage directive.

Safety Precautions

1. Please read carefully all of these instructions below and keep the manual for later use.

2. Please install the swivel base below this product before using it.

3. The voltage ratings and the rated frequency are on the overlay centered at rear side of this product. Do not connect with any other sources of voltage or frequency, and please follow all warnings and instructions marked on the product.

4. Unplug this product from the wall outlet before cleaning and use a damp cloth to clean it. Do not use liquid cleaners or aerosol cleaners.

5. Do not expose this product to rain or moisture.

6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

7. Do not block or cover ventilating openings with cloth or other material. Neither should this product be placed near or over a radiator or a heat register, nor should the product be placed in a built-in installation unless proper ventilation is provided.

8. This product is equipped with a 3-wire grounding model plug. This plug will only fit into a grounding-model power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-model plug. Choose a Tandem Blade attachment plug configuration power cord for 230V AC input.

Due to the safety requirements of different areas, please select a suitable power cord according to the following rules, in addition to the electric rating:

A. Northern America area: Please select a UL listed and CSA certified power cord.

B. Germany: Please select a VDE certified power cord.

C. Nordic countries: Please select a power cord certified by SEMKO, NEMKO, DEMKO or FIMKO.

D. The other areas: Please select a power cord suitable to the local power system and power outlet.

Usually, when this product is sold, the manufacturer provides a suitable power cord. However, this product is sometimes resold or transported to another area, with different power system and safety requirements. Please pay attention to the selection of a suitable power cord. The plug on the power cord is intended to serve as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.

9. Do not allow anything to rest on the power cord. Do not locate this product where persons can walk on the cord.

10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in the risk of fire or electric shock. Never spill liquid of any kind on the product.

11. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to service personnel.

12. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions.

A. When the power cord or plug is damaged or frayed.

B. If liquid has been spilled into the product.

C. If when the operating instructions are followed, the product has been exposed to rain or water.

D. If the product does not operate normally, adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

E. If the product has been dropped or the cabinet has been damaged.

F. If the product exhibits a distinct change in performance, indicating a need for service.

Notice : Actual safety specifications please refer to the label on the back of monitor.

Recommendation for Optimum Performance

When setting up and using the monitor, pay special attention to the following for optimum performance:

- Do not use your monitor against a bright background or where sunlight or other light sources will shine directly on the screen.
- The monitor should be placed just below eye level (10°~15°) for optimum viewing.
- Set the monitor's brightness to match the ambient room light.
- For optimum focus, the contrast control should not be set to the maximum level unless the input signal level is extremely low. Also, the brightness control should be set to a point where the overall background area just begins to disappear.
- Allow adequate ventilation around the monitor so that the heat from the monitor can properly dissipate.
- Neither the monitor itself, nor any other heavy objects, should rest on the power cord. Damage to the power cord can cause fire or electrical shock.
- Keep the monitor away from high-capacity transformers, electrical motors, or other strong magnetic fields.
- Your monitor should not be used in damp, dusty, or dirty areas.
- Handle your monitor with care when transporting it.

CAUTION

- Do not scrap or knock the surface of CRT with a pen, a screwdriver and so on.
- Clean the CRT surface with a lint-free, nonabrasive, soft cloth, and should not use the solution or glass cleaner containing corpuscles like an abrasive, alcohol and an alkaline solution.

Introduction

The monitor is a multiple frequency high-resolution color monitor for IBM compatible PC's or Macintosh and workstation systems. The monitor is equipped with microprocessor based intelligence and multiple frequency scanning capability, allowing it to provide maximum compatibility for various system platforms.

The monitor uses the latest screen technology including a Flat CRT to display crisp text and vivid color graphics. The full-function digital control and On-Screen Display (OSD) system provides easy adjustment of image geometry and color settings for different display modes with the precision of a fixed frequency monitor.

The monitor also has full ergonomic features. In addition to the friendly controls and user comfort features, the emission level of the electric and magnetic field is kept low to meet the Swedish MPR II or TCO standards.

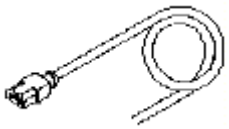
The monitor is also equipped with energy saving functions; it is compatible with the VESA power saving standards.

Installation

Unpacking

The following lists all of the items included in the monitor package box. Please save the original box and packing materials for future transportation or shipment of the monitor.color monitor package should contain the following items:

Color monitor with tilt/swivel base
(with Signal cable)



Power cord

User's Guide / Driver CD

System Setup

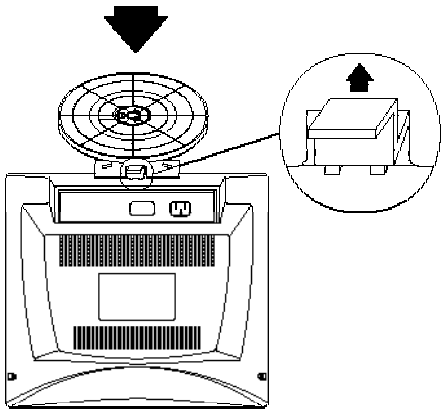
1. Turn off the system and all attached peripherals.

2. Carefully turn the monitor upside down.

Remove the Tilt/Swivel Base

1. Squeeze and hold the latches.

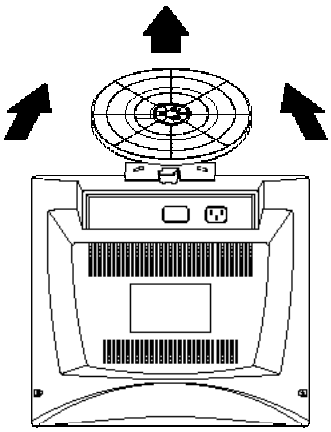
2. Pull the tilt/swivel base to the rear of the monitor and lift to remove the base.



Installing the Tilt/Swivel Base

1. Align the base with the slots on the bottom of the monitor and insert the tilt/swivel base into the slots.

2. Push the tilt/swivel base firmly toward the front of the monitor until the latches click into the locked position.

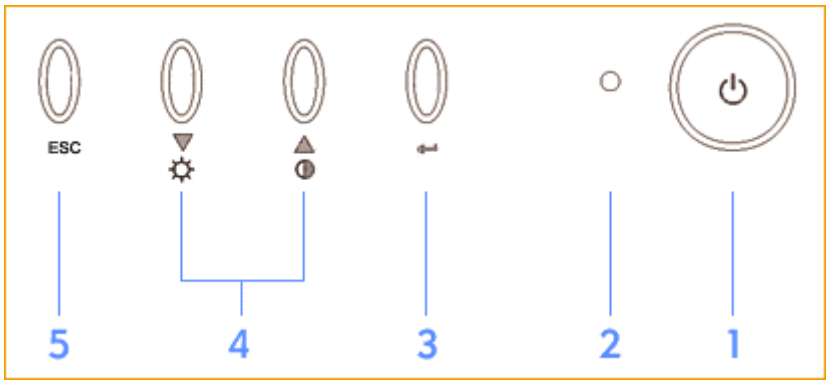


Please save the original box and its packing materials for future transportation or shipment of the monitor.

Control and Adjustments

Once you have installed the monitor for your system, please read the instructions of this section which give you some guidelines on how to use the monitor more efficiently. It leads you through the various function of the user controls and explains how to adjust the monitor to your personal preference.

Front Panel Controls



1. POWER BUTTON

2. POWER INDICATOR

As long as the monitor is powered this indicator is lit. In normal operation it lights green, while in power saving mode the indicator will turn to amber.

3. ENTER BUTTON(↵)

To open On Screen Display (OSD) Menu or Enter Subdirectory and execute it.

4. CONTROL BUTTON

To scroll select the OSD Menu or to adjust the parameter of a selected function.

5. EXIT BUTTON (ESC)

To exit OSD window.

Power Saving Note:

This monitor is equipped with automatic power-saving circuitry design which will work with any computer unit following the VESA DPMS detection format, and the ENERGY STAR low power state definition. Every time when you first turn on your PC and monitor ,the power save function remains inactive, the function will then be triggered when the input signal from the PC is cut off by the computer itself, or through some other loss of signal input afterwards.

OSD (On-Screen Display) Controls

(1) Press "↵" to open the On-Screen menu function. Seven adjustment functions will appear on the On-Screen menu.

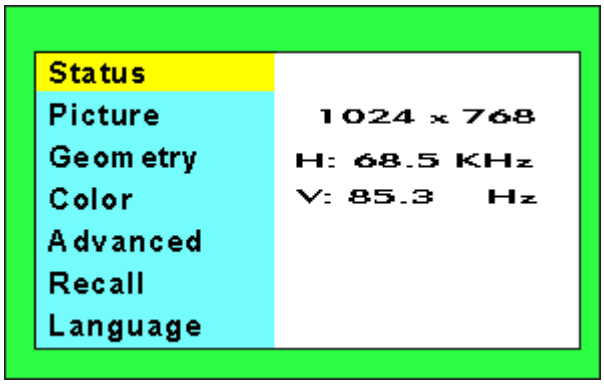
Press "▲" or "▼" button to scroll selections from top-down sequence.

Press "↵" to enter the item which is selected or to activate the preferred adjustments.

Press "**ESC**" to exit the On-Screen Menu or up level.

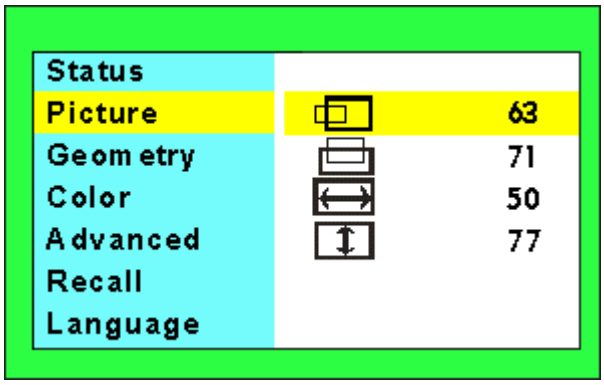
A. Status

To display existing timing data of resolution and frequency.



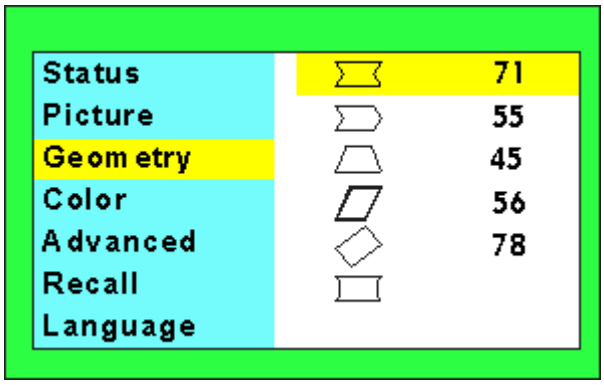
B. Picture

1. Press "▼" or "▲" to select Vertical and Horizontal position, Vertical and Horizontal size.
2. Press "↵" to process.
3. Press "▲" or "▼" to preferred picture.



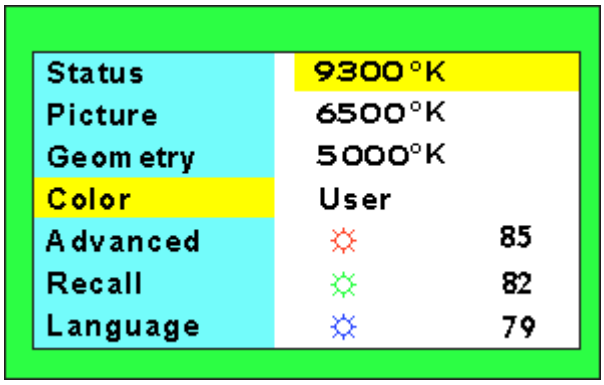
C. Geometry

1. Press "▼" or "▲" to select Side-pin, Balance, Keystone, Parallel, Rotate and Corner.
2. Press "↵" to process.
3. Press "▲" or "▼" to preferred picture.



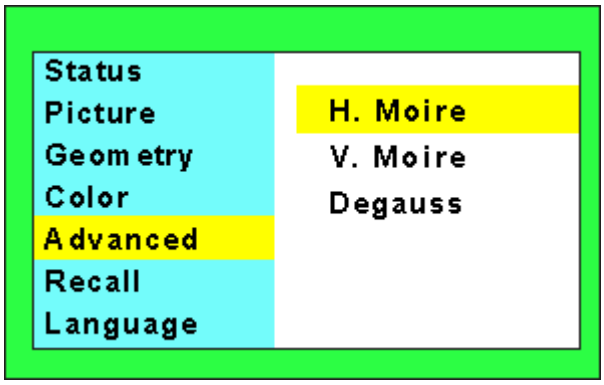
D. Color

1. Press "▼" or "▲" to select 9300°K, 6500°K or 5000°K white color temperature standards.
2. In User item, presses "↵" to confirm action color adjustment.
3. Press "▲" or "▼" to select Red, Green and Blue then press "Enter" to process.
4. Press "▲" or "▼" increase or decrease density.



E. Advanced

1. Press "▼" or "▲" to select H.(Horizontal) and V.(Vertical) moire or Degauss.
2. Press "↵" to process.
3. Press "▲" or "▼" to reduce H. Moire or V. Moire.



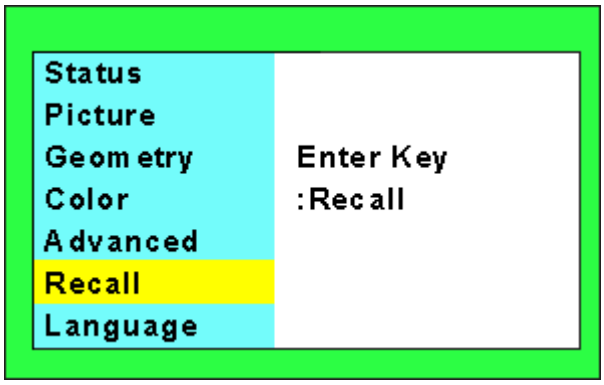
Caution:

1. If moire reduction is overdone, picture quality, i.e. focus and vertical line stability will both be effected.

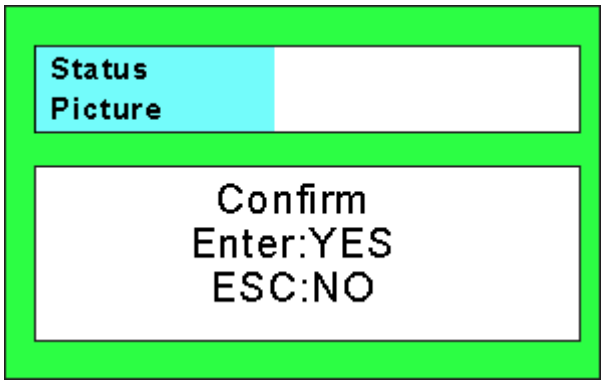
2. Proper adjustment is recommended for not effecting picture performance.

F. Recall

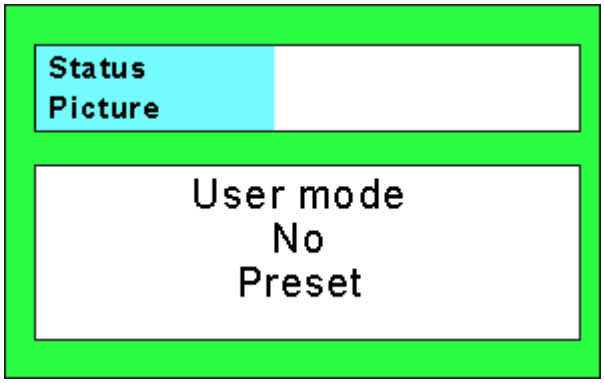
Press the "↵" to confirm the Recall action.



Confirm the Recall action by pressing the "↵" or cancel the action by pressing the "**ESC**".

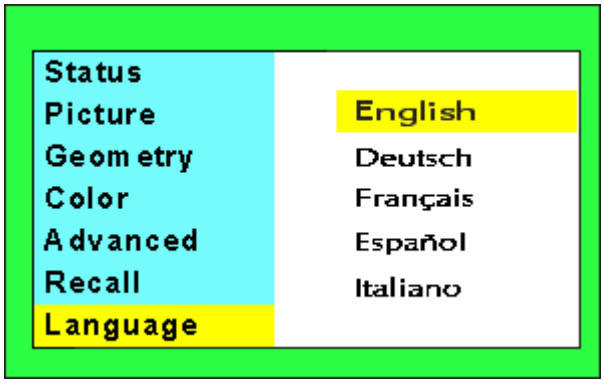


If this window appears, that means it cannot be preset.(factory mode only)



G. Language

Press "▲" or "▼" to select the Language for OSD only.



(2) Contrast/Brightness:

When OSD is off, "▲" or "▼" will be adjust contrast or brightness.

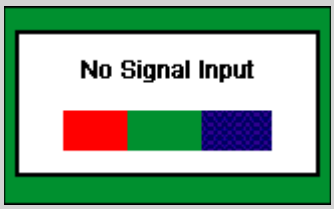
* All adjustments except color adjustment will be automatically saved.

* The menu block will disappear after 20 seconds without any data changing or press "ESC" botton directly.

Trouble Shooting

Before calling an authorized service center, please check that the items below are properly connected or set.

In case of using a non-standard signal, please check the pin assignments and the signal timing of your adapter with the specifications outlined in sections "Pin Assignment Table" and "Preset Timing Chart".

Problem	Items to check
No picture	Power Switch should be in the ON position, and the power cord should be properly connected. Check the color of the power LED indicator; if it is orange, then the monitor is in a power saving mode. Check if the horizontal/vertical frequency are out of range. Maximize the Brightness and Contrast controls.
"No Signal Input" is displayed on the screen 	The video card may not be seated properly. Make sure it is fully seated in its slot. Make sure the signal cable is connected securely to the video card or computer. Enable "Power Save" function.
Display image is not centered, too small, or too large	Refer to "Controls & Adjustments." You need to adjust "Size" and "Position" of the image.
Image is scrolling or unstable	Make sure the signal cable is connected securely to the video card or computer.

Picture is fuzzy	Adjust Contrast and Brightness controls. On all Models select the Degauss function in the OSD control menu. ***CAUTION:*** *A minimum interval of 20 minutes should exist before the degauss button is pressed a second time when not switching between modes. Do not hold the button down continuously.*
Picture bounces or a wave pattern is present in the picture	Move devices that might be causing electrical interference away from the monitor. (See "FCC Information.")
Edges of the display image are curved either inward or outward	Refer to "Controls and Adjustments." You need to adjust the "Side Pincushion."
No Plug & Play functionality	Verify that the host system is Plug & Play compatible. Check to see if Windows 95 is installed, and the software key for the Data Display Channel (DDC) function is enabled. Determine if original manufacturer's detachable signal cable is being used (D-Sub-15 pin only).

Energy Declaration

This monitor is equipped with a function for saving energy which supports the VESA Display Power Management Signaling (DPMS) standard. This means that the monitor must be connected to a computer which also supports the VESA DPMS standard to fulfill the requirements of the NUTEK specification 803299/94/96. The time settings for switching to a power saving mode are adjusted from the system unit by software. From the first indication of inactivity to power saving position A2 the total time must not be set to more than 70 minutes.

1. VESA Power-Management Proposal

H. sync	V. sync	Video	State
Off	On	Blank	Stand-by
On	Off	Blank	Suspend
Off	Off	Blank	Off

2. Power Consumption (120/230 Vac)

NUTEK	VESA state	LED indicator	Power Consumption
Normal operation	On	Green	< 100W
Power Saving Position A1	Suspend	Amber	≤ 15W
Power Saving Position A2	Off	Amber	≤ 5W

Specification

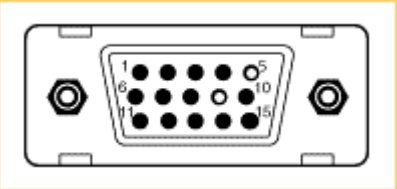
Color Picture Tube	43.1 cm / 17" (16" viewable screen size) diagonal measurement, 90 degree deflection, Flat CRT, anti-glare, anti-reflection, anti-static, medium short persistence phosphor, dark bulb
Dot Pitch	0.25 / 0.20(Horizontal) mm
Input Signal	Analog 0.7V peak to peak separate TTL Positive or Negative
Scan Frequency	Horizontal: 30 to 97 kHz automatically Vertical: 50 to 160 Hz automatically
Max. Resolution	1600 x 1200 pixel, non-interlaced
Display Colors	Analog input, unlimited colors
Pixel Rate	202 MHz
Plug & Play	DDC 1 / DDC 2B
Power Supply	100-240 VAC, 50/60 Hz (automatically)
Power Consumption	100W max.
Dimensions	412(W) x 415(H) x 417(D) mm
Weight	16.5 kgs(G.W.), 19.2 kgs(N.W.)
Environment Consideration	**Operating** Temperature: 0°C to 35°C Humidity: 20% to 80% **Storage** Temperature: -20°C to 60°C Humidity:10% to 90%

Note: Specifications are subject to change without notice.

Reference Information

This color monitor supports multiple operating platforms such as IBM compatible and Macintosh family computers. This section provides you with detailed information on pin assignment of the D-Sub connector and the preset timing chart of the prevailing video standards.

Connector Pin Assignments



Male Mini D-15 Connector

Signal	15 Pin Mini D-Sub
Red Video	1
Green Video	2
Blue Video	3
Horizontal Sync	13
Vertical Sync	14
Ground	4,6,7,8,10,11
No Connection	5,9
SDA (DDC)	12
SCL (DDC)	15

Notice: This monitor is equipped with Plug & Play capability (VESA DDC 1/2B). To utilize this capability, your graphic card and hosting system have to be Plug & Play compatible as well. When properly plugged (Plug), the graphic card and hosting system will automatically (Play) identify, configure, and most importantly, optimize this monitor's capabilities, providing you with simple and easy installation and setup.

Preset Timing Chart

Note: *This monitor is equipped with a microprocessor which allows the user to set his own preferred mode(s) beyond those standard mode listed below.*

To reduce visual tiredness and eye strain, it is recommended to choose the highest refresh modes available.

Resolution	Format	Horizontal Frequency (KHz)	Refresh Rate (Hz)
640x480@60Hz	VGA	31.5	60
640x480@85Hz	VESA	43.3	85
720x400@70Hz	VGA	31.5	70
800x600@75Hz	VESA	46.9	75
800x600@85Hz	VESA	53.7	85
1024x768@75Hz	VESA	60	75
1024x768@85Hz	VESA	68.7	85
1280x1024@75Hz	VESA	80	75
1280x1024@85Hz	VESA	91.1	85